REMARKS

Reconsideration and the timely allowance of the pending claims, in view of the following remarks, are respectfully requested.

In the Office Action dated September 28, 2005, the Examiner rejected claims 82-83, 85-87, 89-93, 107-113, and 125-126, under 35 U.S.C. §102(e), as allegedly being anticipated by <u>Meier '991</u> (U.S. Patent No. 6,407,991); rejected claims 94-97 and 105-106, under 35 U.S.C. §102(e), as allegedly being anticipated by <u>Zintel '281</u> (U.S. Patent. No. 6,725,281); rejected claims 127 and 131-132, under 35 U.S.C. §102(e), as allegedly being anticipated by <u>Riihinen '331</u> (U.S. Patent. No. 6,697,331); rejected claims 84 and 114-117, under 35 U.S.C. §103(a), as allegedly being unpatentable over <u>Meier '991</u> in view of <u>Zintel '281</u>; rejected claim 88, under 35 U.S.C. §103(a), as allegedly being unpatentable over <u>Meier '991</u> in view of <u>Devine '708</u> (U.S. Patent No. 6,606,708); rejected claims 98-104, under 35 U.S.C. §103(a), as allegedly being unpatentable over <u>Zintel '281</u> in view of <u>Devine '708</u>; rejected claims 118-124, under 35 U.S.C. §103(a), as allegedly being unpatentable over <u>Meier '991</u> in view of <u>Devine '708</u>; rejected claim 128, under 35 U.S.C. §103(a), as allegedly being unpatentable over <u>Riihinen '331</u> in view of <u>Bielfeld '949</u> (U.S. Patent No. 6,400,949); rejected claims 129-130, under 35 U.S.C. §103(a), as allegedly being unpatentable over <u>Riihinen '331</u> in view of <u>Vanucci '727</u> (U.S. Patent No. 5,459,727); rejected claims 133-134, under 35 U.S.C. §103(a), as allegedly being unpatentable over <u>Meier '991</u> in view of <u>Vimpari '671</u> (U.S. Patent No. 6,577,671); and rejected claims 135-138, under 35 U.S.C. §103(a), as allegedly being unpatentable over <u>Meier '991</u> in view of <u>Vimpari '671</u> and <u>Agrawal '777</u> (U.S. Patent No. 6,075,777).

By this Amendment, independent claims 94, 127, and 133 have been amended to provide a clearer presentation of the claimed subject matter. Applicant submits that no new matter has been introduced.

Applicant respectfully traverses the prior art rejections, under 35 U.S.C. §102(e), §103(a), for the following reasons:

I. Prior Art Rejections Under 35 U.S.C. §102(e), §103(a).

As indicated above, each of independent claims 82, 94, 107, 127, and 133 positively recites the use of "at least one self-configuring virtual node." Such a feature is amply supported by the embodiments disclosed in the Specification. (*See, e.g.,* Specification: page 11, line 9 – page 12, line 9; page 13, lines 4-20; page 20, lines 8-21; page 21, line 19-page 22, line 16; FIGs. 2, 5-8). By way of illustration, the disclosed embodiments provide that self-configuring virtual nodes comprise individually-addressable entities that are enabled for wireless communications. (*See,* Specification: page 11, lines 9-10). The self-configuring virtual nodes, are equipped with the capability of automatically executing a self-configuration cycle upon initialization or in the event of a disruption in the network structure. That is, the virtual nodes are capable of self-initiating a rules-based process to establish connectivity and form a network, and can be self-healing. (*See,* Specification: page 20, lines 10-19). See also pages 22-23.

Unlike the present invention, there is nothing in the references of record that teach the combination of features recited in claims 82, 94, 107, 127, and 133 including the use of at least one self-configuring virtual node. In particular, the Meier '991 reference discloses the use of a *hierarchical* network in which a plurality of wired access points WDAP 267, 263, 271, 273 facilitate communications for wireless remote stations 269, 275, 277, 279 and wireless communication devices 283, 284. (*See,* Meier '991: col. 7, 10-20; FIG. 6). The hierarchical organization is defined by a spanning tree structure in which wired access points WDAP 267, 263, 271, 273, designated as root nodes in the network, broadcast messages offering attachment to potential network nodes. (*See,* Meier '991: col. 7, lines 22-25, 44-50, FIG. 6).

In so doing, the network nodes are not self-configuring, as recited in claims 82, 94, 107, 127, and 133. The network nodes are neither capable of self-initiating a process to form a network nor are they capable of executing a self-configuration cycle. Rather, the wired access points WDAP **267, 263, 271, 273** of the established network initiate the attachment of potential nodes.

Applicant further submits that none of the references of record cure the deficiencies identified above relative to the Meier '991 reference. For example, the Zintel '281 reference is directed to a Universal Plug and Play (UPnP) open network architecture. (*See*, Zintel '281: col. 4, lines 5-16). Regarding the configuration of network devices, Zintel '281 merely teaches that the UPnP protocol includes an automatic network introduction feature that establishes an appropriate configuration with an IP address for an embedded computing device **900** upon connection to a server computer on a computer network, so as to enable access to the device from a client. (*See,* Zintel '281: col. 49, lines 56-67; FIGs. 27, 28). That is, once embedded or plugged into the network, computing device **900** executes a series of steps (*e.g.,* announcement, discovery, response, autonet, and device description) to achieve access to the network. Thus, by virtue of having to be already embedded into an established computer network to execute the access steps, the embedded computing device **900** cannot be construed as a self-configuration virtual node, as required by claims 82, 94, 107, 127, and 133.

The Riihinen '331 reference is directed to a cellular-based telecommunications network. (*See* Riihinen '331: col. 5, lines 32-46; FIG. 1). Riihinen '331 describes the operation of a transmission controller **612** for a transmitter retransmission and acknowledgment unit and a reception controller **622** for a receiver retransmission and acknowledgment unit. (*See,* Riihinen '331: col. 10, lines 26-31; FIGs. 7A, 7B). The transmission controller **612** performs a polling function **630** having a poll timer that ensures that feedback is received from the receiver and that the last segment in a transmission window of the transmission buffer is delivered. The poll timer does not expire

if the requested feedback was lost and the poll timer may be started (or restarted) when one of three articulated conditions occurs. (*See,* Riihinen '331: col. 10, lines 44-63).

There is, however, nothing in the Riihinen '331 reference that teaches or suggests the use of self-configuring virtual nodes, as recited in claims 82, 94, 107, 127, and 133. That is, Riihinen '331 relates to the initiation of polling messages and acknowledgement responses, but remains silent with regard to nodes that self-initiate a process to form a network or nodes that are capable of executing a self-configuration cycle.

Moreover, as best understood, none of the remaining references, including the Devine '708, Bielfeld '949, Vanucci '727, Vimpari '671, and Agrawal '777 references, appear to teach or suggest the use of a self-configuring virtual nodes, as required by claims 82, 94, 107, 127, and 133.

For at least these reasons, Applicant submits that none of the references teach the claimed combination of elements recited by independent claims 82, 94, 107, 127, and 133. Accordingly, claims 82, 94, 107, 127, and 133 are patentable over these references. And, because claims 83-93, claims 95-106, claims 108-126, claims 128-132, and claims 134-138 depend from independent claims 82, 94, 107, 127, and 133, respectively, claims 83-93, claims 95-106, claims 108-126, claims 128-132, and claims 134-138 are patentable at least by virtue of dependency as well as for their additional recitations.
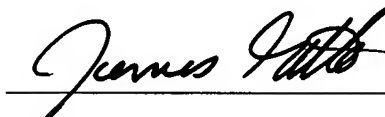
II. Conclusion.

All matters having been addressed and in view of the foregoing, Applicant respectfully request the entry of this Amendment, the Examiner's reconsideration of this application, and the immediate allowance of pending claims 82-138.

Applicant's Counsel remains ready to assist the Examiner in any way to facilitate and expedite the prosecution of this matter. Please charge any fees associated with the submission of this paper to Deposit Account Number 033975.

The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Dated: December 28, 2005   Respectfully submitted,

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